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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,049

05/19/2006

Kazumi Ogawa

KITA.0023

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38327

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05/09/2008

REED SMITH LLP

3110 FAIRVIEW PARK DRIVE, SUITE 1400

FALLS CHURCH, VA 22042

EXAMINER

CHANG, CHING

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

05/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/580,049	<b>Applicant(s)</b> OGAWA ET AL.	
	<b>Examiner</b> CHING CHANG	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-5 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/19/06, 8/15/06, 10/23/06, 3/5/07, 3/20/07.

## DETAILED ACTION

This Office acknowledges the Preliminary Amendment filed on 5/19/06.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. ***Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawaraguchi (JP '719).***

Kawaraguchi discloses a valve opening/closing timing controlling apparatus, comprising: a housing member (12) rotatable together with a drive member for transmitting a drive force; a rotor member (17) rotatably assembled with the housing member, a vane portion (17a-17d) of the rotor member forming, within said housing member, a phase-advanced oil chamber (56) and a phase-lagged oil chamber (52), the rotor member being rotatable together with a cam shaft; a torsion coil spring (27) for urging the rotor member relative to the housing member in a phase advancing direction; and a hydraulic circuit for controlling feeding/discharging of work oil to or from said phase-advanced oil chamber or said phase-lagged oil chamber; wherein said torsion coil spring has one end thereof fixed to said housing member and the other end thereof

fixed to a projection (26) provided on said rotor member, the projection projecting in a rotational axis direction of said rotor member; the other end of the torsion coil spring is retained in a retaining groove defined in said projection of the rotor member.

**3. *Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani et al. (US Patent 6,405,695).***

Mizutani discloses a valve opening/closing timing controlling apparatus, comprising: a housing member (7) rotatable together with a drive member for transmitting a drive force; a rotor member (4) rotatably assembled with the housing member, a vane portion (4a-4c) of the rotor member forming, within said housing member, a phase-advanced oil chamber (83-85) and a phase-lagged oil chamber (80-82), the rotor member being rotatable together with a cam shaft; a torsion coil spring (60) for urging the rotor member relative to the housing member in a phase advancing direction; and a hydraulic circuit for controlling feeding/discharging of work oil to or from said phase-advanced oil chamber or said phase-lagged oil chamber; wherein said torsion coil spring has one end thereof fixed to said housing member and the other end thereof fixed to a projection (44) provided on said rotor member, the projection projecting in a rotational axis direction of said rotor member.

**4. *Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al. (US Patent 6,758,178).***

Takahashi discloses a valve opening/closing timing controlling apparatus, comprising: a housing member (2) rotatable together with a drive member for transmitting a drive force; a rotor member (7) rotatably assembled with the housing

member, a vane portion (8) of the rotor member forming, within said housing member, a phase-advanced oil chamber (5a) and a phase-lagged oil chamber (5b), the rotor member being rotatable together with a cam shaft; a torsion coil spring (15) for urging the rotor member relative to the housing member in a phase advancing direction; and a hydraulic circuit for controlling feeding/discharging of work oil to or from said phase-advanced oil chamber or said phase-lagged oil chamber; wherein said torsion coil spring has one end thereof fixed to said housing member and the other end thereof fixed to a projection (17; 17a) provided on said rotor member, the projection projecting in a rotational axis direction of said rotor member; the other end of the torsion coil spring is retained in a retaining groove (19) defined in said projection of the rotor member.

***Allowable Subject Matter***

5. Claims 4-5 are allowed.
6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHING CHANG whose telephone number is (571)272-4857. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571)272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ching Chang/  
Primary Examiner, Art Unit 3748